

ABSTRACT

MATRIX ARCHITECTURE FOR DSL APPLICATIONS

A Digital Subscriber Line [DSL] or Very High Speed Digital  
Subscriber Line [VDSL] telecommunication device with a downstream  
5 path and an upstream path, each path comprising a plurality of  
processors interconnected with a plurality of memories. The processors  
and the memories are arranged as input/output border column and row  
of an interconnecting matrix architecture constituted by  
interconnection devices able to interconnect the processors of the  
10 column with the memories of the row. This arrangement allows  
mapping different architectures simply by changing the status of the  
interconnection devices. The matrix arrangement provides a very  
flexible simulation platform for different possible applications and,  
even when implemented on silicon, the ASIC has a maximum of flexibility  
15 and can be adapted to different standard.

Fig. 2 is attached to the abstract.